# **Detection of CD-40 in Frozen Mouse Tissue**

#### **Reagents:**

1X Automation Buffer
3% Hydrogen Peroxide
Antibody Diluent
Citrate Buffer
DAB Chromagen
Hematoxylin

#### **Antibody Information**

Blocking serum: Normal Goat Serum
Jackson Immunoresearch Laboratories, Inc.
West Grove, PA 19390
www.jacksonimmuno.com
1-800-367-5296
Catalog #005-000-121

Avidin Biotin Blocking Kit Vector Laboratories, Inc. Burlingame, CA 94010 www.vectorlabs.com 1-800-227-6666 Catalog #SP-2001

Negative control: Purified Rat IgG 2a BD Pharmingen Distributed by Transduction Labs Lexington, KY 40511 1-800-227-4063 Catalog # 559073

Primary antibody: (Rat anti-mouse CD40 monoclonal) BD Pharmingen Distributed by Transduction Labs Lexington, KY 40511 1-8006227-4063 Catalog # 550285 Secondary Antibody: Biotin-Conjugated Goat anti-rat IG (muliple adsorbed)

BD Pharmingen

Distributed by Transduction Labs

Lexington, KY 40511

1-8006227-4063

Catalog #5590286

Suggested dilution 1:200

### Label antibody: Super Sensitive Label Antibody

**Biogenex Laboratories** 

San Ramon, CA 94583

www.biogenex.com

1-800-421-4149

Catalog #HK330-5K

## **Staining Procedure**

-Positive Control Tissue: Mouse spleen and thymus (B-cells and dendritic cells)

-Stain localization: Cell membrane

### For Frozen Tissue Sections

Two sequential 6 micron sections were cut per slide (Probe-On Plus by Diagger). Sections are cut and immediately fixed in Rapid Fix (Shandon-Lipshaw) for 7 seconds. Place section in 1X AB. After the last section is cut, wash in 1X AB for 5 minutes. Repeat buffer wash.

Cut sections the day of staining.

Allow to air dry 30 minutes at room temperature after the last slide has been cut.

Place slides in cold acetone (-20) for 2 minutes.

Allow slides to air dry for 30 minutes.

Place in 1X AB for 5 minutes

- 1 Quench endogenous peroxidase by placing slides in 0.3% hydrogen peroxide for 30 minutes.
- 2 Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each.

3	Apply 5%	Normal Goat Serum for 20 minutes at room temperature.
Lo	ot#	Reconstituted Date

Wipe excess reagent from around tissue section. DO NOT RINSE SECTIONS WITH BUFFER. 5 Apply Avidin/Biotin block Lot#\_\_\_\_\_ New kit yes / no Apply avidin block - 15 min @ RT. Quick rinse in 1X AB. Apply biotin block - 15 min @ RT. No wash, wipe excess block and apply primary antibody DO NOT RINSE SLIDES WITH BUFFER BEFORE ADDING PRIMARY ANTIBODY. 6. Apply primary antibody (CD-40) at a 1:40 dilution and incubate for one hour. Lot#\_\_\_\_\_ Aliquoted yes / no Date Aliquoted\_\_\_\_\_ On negative control slides, normalize the concentration of purified Rat IgG-2a negative control with the protein concentration of the CD-40 antibody. Apply to slides at a 1:40 dilution and incubate for one hour. Lot#\_\_\_\_\_ Reconstituted Date\_\_\_\_\_ 7. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each. 8. Apply secondary antibody (Goat anti-rat IgG) at a 1:200 dilution and incubate for 30 minutes. Lot#\_\_\_\_\_ Reconstituted Date\_\_\_\_\_ 9. Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each. 10. Apply Label antibody (StriAviGen Super Sensitive Predilute) for 30 minutes. Lot #\_\_\_\_\_ Exp. Date \_\_\_\_\_ 11 Rinse slides in 2 changes of 1X Automation Buffer for 5 minutes each. 12 Apply liquid Dako DAB Chromagen for 6 minutes in the dark. (Add 1 drop of DAB per ml of substrate) Lot#\_\_\_\_\_ Exp. Date\_\_\_\_\_ new kit yes / no

14 Counterstain with Modified Harris Hematoxylin for 30 seconds.

13 Rinse in tap water 3 minutes.

- 15 Rinse in tap water until water is clear.
- 16 Place slides in 1X Automation buffer for one minute with gentle agitation to blue slides.
- 17 Dehydrate through the following solutions.

95% alcohol	1 times	3 mins
100% alcohol	3 times	3 mins
Xylene	2 times	5 mins

18. Coverslip. updated 1/14//2004